

## FIELD TRIPS

### Trip of May 25 and 26 at Branchville, N. J.

The Torrey Club field trip for this weekend was a combination trip with the Suffolk County Naturalists' Club. Seventy-seven members of the two clubs registered at the Pines, a charming inn half hidden in a grove of white pines. Among those present were high school teachers representing eight of the New York City schools, nearly all of them members of the Torrey Club. Mr. and Mrs. William Gavin Taylor were official host and hostess of the party and made it a very pleasant as well as profitable occasion for everyone. With early morning bird hikes, fern, moss and general flower hikes through the day, one day spent in a survey of the geological features of the surrounding country under the direction of Dr. Henry B. Kummel, State Geologist of New Jersey, and evenings devoted to star study, the days were filled delightfully. The following account of the ferns was sent in by Dr. Benedict and Mr. Taylor has compiled a list of all birds seen.

#### FERN HUNTING AT BRANCHVILLE

One of the disadvantages of fern hunting, compared with bird hunting, as noted by the frank wife of a bird enthusiast at the recent Branchville field meeting, is the fact that with ferns you have to prove your identification. The fern stays put, and if you declare some remarkable find, it is up to you to show it to every 'doubting Thomas' and prove your case. With birds, however, a quick glimpse of a brown motion at the top of a tree,—“That was a cerise-throated whiffle-bird,” and down it goes on your list. I know 'wishful thinking' would exert constant pressure if ever I should take up birds seriously.

Even in ferns, it can play its part as was evidenced also at the Branchville meeting on one of the morning trips. In a deep vertical crack in a large's limestone ledge there was found a pinnate *Adiantum*. The wishful thinking started: “Perhaps it's *Adiantum Capillus Veneris*; that pinnate. Of course it is a small and undeveloped leaf, but the pinnate aren't lunulate enough for *pedatum*. They are more cuneate, like those of the Venus-hair fern. *Capillus-Veneris* has been found up north in the Cattskills, so it might

readily be here. This is the sort of situation it would be likely to favor. Etc." But the fern stayed right where it was, and everybody looked at it. There is no *Capillus Veneris* on the list which follows.

Despite such limitations, the fern count for the two days, starting with five after supper Friday evening, grew to eighteen before breakfast the next morning; to twenty-five by noontime, and reached thirty during the afternoon. Three families are represented and fifteen genera.

The rarest species in the leader's experience was the wall rue (*Asplenium Ruta-muraria*) which grew in small tufts in almost any rock exposure on the hotel property, almost within sight from the front porch itself. With it was the purple cliff brake and scattered walking ferns, neither in the best development, but frequent on almost any ledge. The other rock ferns were *Cystopteris fragilis*, *Asplenium Trichomanes*, *Polypodium vulgare*, and *Woodisia obtusa*, with *Asplenium platyneuron* standing up straight on grassy rocky banks.

On rocks and in deeper woods soil, *Dryopteris marginalis* was everywhere, easily the commonest fern seen, as it so often is. Ten other dryopterids were found. A few scattered plants of *D. intermedia* the florists' "fancy fern" were all of this species seen, mostly in upland situations. For *D. cristata*, *D. spinulosa*, and *D. Boottii*, a special trip to swampy woods was necessary. Three small swamps were visited, one near Lafayette and two near Sparta, and these swamps or lowland forms were found in all three. As a matter of record, it is hereby recorded that plants of these three and of *Osmunda regalis* were brought back to the Pines property and set out in appropriate situations along the small lake where they were not found naturally. The tallest and finest of all our northern shield ferns, *D. Goldiana*, was well represented in a small but vigorous colony.

The three species of the old Phegopteris section of the genus *D. phegopteris*, *D. hexagonoptera*, and *D. Dryopteris* were found in a few places in the hotel woodlands; also the marsh fern and the New York fern, *D. thelypteris* and *D. noveboracensis* respectively, although these were decidedly not common.

The maidenhair, *Adiantum*, was everywhere in the woods, forming frequently and vigorous clumps. The brake, *Pteridium*

*latiusculum*, the sensitive fern (*Onoclea*) and the lady fern, probably only the upland form, (*Athyrium angustum*), were easily discovered. One clump of ostrich fern (*Matteuccia*) was seen just back of the hotel building, in a favorite habitat of black, mucky soil. With it, and elsewhere, was a good growth of the hay-scented fern (*Dennstaedtia*).

The *Osmunda* family was represented on the Pines property by two species, *O. cinnamomea*, and *O. Claytoniana*, but the lake shore was most favorable for these and *regalis* also, and all three should increase in number.

Only two members of the *Ophioglossum* family were found, two botrychiums. *B. virginianum* was everywhere through the woods, as scattered plants. After considerable search had proved unavailing, *B. matricariaefolium* was unexpectedly found by a well-trodden path in the woods to the number of some twenty scattered plants, varying from tiny specimens, barely above the leaves to others, several inches high. Wishful thinking might have added two more 'species' here; one of these 'matricaries' was slender, suggesting the Onondaga moonwort; two or three others were triangular, like *B. lanceolatum*. No adders' tongue (*Ophioglossum*) was found, although some search was made in boggy ground at the edge of the Sparta swamp.

The whole list of thirty is interesting, not only for the species represented, but for some unexpected omissions of rather common forms; the silver spleenwort; *Dryopteris Clintoniana*, *Cystopteris bulbifera*, and two ternate botrychiums;—these are very likely to be found in the course of a more extended search on the Pines property itself, while some nearby sphagnum bog should yield *Woodwardia virginica*, and the adder's tongue is almost certain to turn up where least expected. A final total of forty species is probably safe prediction for the general Branchville region.

The writer will be glad to send any readers interested a small assortment of fern literature, including as long as they last, a key to *Botrychium* and a sample copy of the *American Fern Journal*, now in its nineteenth volume. The Fern Society would be glad to join in promoting any future Branchville field meetings, if invited.

RALPH C. BENEDICT

## BIRD CENSUS

Record of birds observed within a radius of one mile from the Pines Inn.

1. Green Heron	37. Baltimore Oriole
2. Spotted Sandpiper	38. Purple Grackle
3. Killdeer	39. English Sparrow
4. Ring-necked Pheasant	40. Vesper Sparrow
5. Mourning Dove	41. Goldfinch
6. Turkey Vulture	42. Grasshopper Sparrow
7. Black Vulture (?)	43. White-throated Sparrow
8. Cooper's Hawk	44. Chipping Sparrow
9. Sparrow Hawk	45. Field Sparrow
10. Long-eared Owl	46. Song Sparrow
11. Great Horned Owl	47. Swamp Sparrow
12. Yellow-billed Cuckoo	48. Towhee
13. Black-billed Cuckoo	49. Rose-breasted Grosbeak
14. Kingfisher	50. Indigo Bunting
15. Downy Woodpecker	51. Scarlet Tanager
16. Red-headed Woodpecker	52. Purple Martin
17. Flicker	53. Barn Swallow
18. Whippoorwill	54. Rough-winged Swallow
19. Nighthawk	55. Tree Swallow
20. Chimney Swift	56. Cedar Waxwing
21. Humming Bird	57. Red-eyed Vireo
22. Kingbird	58. Warbling Vireo
23. Crested Flycatcher	59. Yellow-throated Vireo
24. Phoebe	60. Blue-headed Vireo
25. Olive-sided Flycatcher	61. Black and White Warbler
26. Wood Pewee	62. Worm-eating Warbler
27. Alder Flycatcher	63. Blue-winged Warbler
28. Least Flycatcher	64. Golden-winged Warbler
29. Blue Jay	65. Tennessee Warbler
30. American Crow	66. Parula Warbler
31. Starling	67. Yellow Warbler
32. Bobolink	68. Myrtle Warbler
33. Cowbird	69. Magnolia Warbler
34. Red-winged Blackbird	70. Chestnut-sided Warbler
35. Meadowlark	71. Bay-breasted Warbler
36. Orchard Oriole	72. Black-poll Warbler

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| 73. Blackburnian Warbler         | 83. Brown Thrasher          |
| 74. Black-throated Green Warbler | 84. House Wren              |
| 75. Ovenbird                     | 85. White-breasted Nuthatch |
| 76. Northern Water Thrush        | 86. Chickadee               |
| 77. Louisiana Water Thrush       | 87. Wood Thrush             |
| 78. Maryland Yellow-Throat       | 88. Wilson's Thrush         |
| 79. Wilson Warbler               | 89. Olive-backed Thrush     |
| 80. Canadian Warbler             | 90. Robin                   |
| 81. Redstart                     | 91. Bluebird                |
| 82. Catbird                      |                             |

WM. GAVIN TAYLOR

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### Field Trip of June 1

Interesting plants of Pine Barren, moist woods, and Leather-leaf bog associations were seen by members of the Torrey Botanical Club on Saturday afternoon, June 1, on a field excursion led by Prof. M. A. Chrysler, of the Department of Botany, Rutgers University, from Spotswood, N.J.

In an area east of Spotswood, which is part of the "Pine Barren Island," shown by Witmer Stone, in his map of the state in his Flora of Southern New Jersey, the party found Prickly Pear Cactus, *Arenaria Caroliniana*, *Hudsonia tomentosa*, in clumps quite like those found on the seashore; the curious *Euphorbia Ipecacuanhae*, with its varied forms of leaves and *Lupinus perennis*.

Along the Manalapan river, both *Woodwardia virginica* and *areolata*, seen for the first time together by many of the party, were found; with the handsome flowered *Lyonia mariana*, or Stagger Bush, and *Leucothoe racemosa*. Opportunities were excellent for comparing *Pinus rigida* and *echinata*.

An unusual discovery was that of a hybrid oak, which had characters suggesting the white oak in the lobation of the leaves, or even such species as the Spanish, laurel or willow oaks, but smaller chestnut oak, or the blackjack oak, in their size. *Quercus alba*, *stellata*, *marilandica*, and *prinoides* all grew within fifty feet of this hybrid, and one might have several guesses as to its parents.

In wet woods and a Chamaedaphne swamp near Helmetta, which the party was able to reach quickly in automobiles provided



by Dr. Chrysler and his associates at the University, the party found *Chamaecyparis*, some of large size; *Sarracenia*, *Drosera rotundifolia*, *Magnolia virginiana*, *Disporum lanuginosum*, and *Nymphaea microphylla*.

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### Field Trip of June 16

#### INTERESTING PLANTS ON THE APPALACHIAN TRAIL ON KITTATINY MOUNTAIN, NEW JERSEY

Three interesting plants were observed by a party including members of the Torrey Botanical Club, which was scouting for the location of the Appalachian Trail from Maine to Georgia, on Kittatiny Mountain, in Sussex County, New Jersey, on Sunday, June 16.

In an extensive rhododendron swamp, between two crests of the ridge, six miles southwest of Culver Gap, was found Red Spruce, which added another stand, in my knowledge, of this northern tree, which occurs in a few high cold swamps in the northern New Jersey and Orange County, New York, highlands. Another northern plant, common enough at low altitudes in northern New England and at high altitudes in the Catskills, but very rare in the vicinity of New York City, was *Cornus canadensis*, the Bunchberry, which has been reported before in Sussex County. It grew in dense shade of hemlocks and did not seem very thrifty, and was not blooming or showing any signs of bloom, but some of the stems had developed a second whorl of two or three leaves above the usual one of five or six. Apparently it was spreading, if at all, only by root growth.

Along the dirt road on the southeastern foot of the mountain for more than a mile, two to three miles south of the state highway from Branchville, past Culver Lake, through Culver Gap to Dingman's Ferry on the Delaware River, we found a plant which I had seen only once before, the Indian Physic, *Porteranthus trifoliatus*, the previous location being about ten miles northeast on the eastern foot of this ridge. It was numerous and thrifty with many blossoms, along the stone walls and fences beside the road. I note that Norman Taylor in his Flora of the vicinity of New York, says it is rare in the Highlands of the Hudson, but found in Sussex, Warren,

Hunterdon, Morris, Passaic and Bergen counties in New Jersey (probably the Bergen county record is an old one and it no longer exists there). He also says it is not found on Tertiary formations, is rare on the Cretaceous, and is scattered and local on the older formations, "most common on limestone." The two stations where I have found it are along the contact between the sandstones of the Kittatiny ridge and the limestones or limy shales of the valley eastward. It was very handsome and conspicuous in the occurrences found on June 16, suggesting at a little distance some kind of tall aster, and I remember that the first time I saw it, I was puzzled to decide its family relationship and it required considerable search in the manuals to run it down to the Rosaceae. The location is about seventy-five miles from New York, by the motor highway via Pompton, Butler, Newfoundland, Franklin, North Church, Branchville, to Culver Lake, then southwest on the dirt road along the eastern foot of the mountain, past Owassa Lake.

RAYMOND H. TORREY

#### VAGNERA STELLATA GROWING IN DUNE SAND

A fairly numerous and apparently thrifty colony of *Vagnera stellata*, (Smaller False Solomon's Seal) which is rare in the territory covered by the Torrey Botanical Club, in my own observation and is listed as "rare and local" in Norman Taylor's catalogue of plants of that territory, occurs in Sunken Meadow State Park, of the Long Island State Park system, on the north shore of the island, near King's Park. The station is interesting, not only because of the rarity of the plant, but because of the arid conditions. Both Britton and Gray speak of its habitat as in moist woods or other moist places, but this Long Island occurrence is in wind blown sand, about ten feet above the highest storm tides on the beach just below it. Back of the beach is a low, narrow ridge, partly a continuation of a moraine lobe of gravel and sand, from a higher mass to the west, and partly wind blown sand to a depth of two or three feet on the top of the ridge. Other plants are bayberry, beach plum, *Solidago maritima*, choke cherry, red cedar, post and white oaks, the oaks stunted and gnarled from their exposed position, bearing the brunt of west and north winds across Long Island Sound. The colony of *Vagnera stellata*, numbering perhaps fifty plants, of which

most were in bloom on May 25, grew in loose, white sand, in which rainfall must quickly sink beneath the surface. It may be a survival from a richer soil underneath, since covered with sand. I have seen it in the Highlands of the Hudson, on moist banks in woods, with *Vagnera racemosa*, with which it seemed in a natural habit, but its occurrence in this arid marine shorefront locality on Long Island seemed abnormal.

Raymond H. Torrey